



FK-V SERIES

End Suction Vertical Centrifugal Pump





GENERAL INFORMATION

Discharge Flange	DN 50 - DN 600
Capacity	Up to 6000 m ³ /h
Head	UP to 100 m
Frequency	Three Phase 50 Hz - 60 Hz*
Maximum Operating Pressure	Up to 16 bar



Transferable Liquids

- Clean or dirty, abrasive, medium-viscosity fluids.



Shaft Sealing

- Soft packing is used in standard production.
- It is possible to use mechanical seal according to customer request or type of liquid.



Applications

Water treatment and Pressurization	Power Plants
Heating, Ventilating and Air Conditioning	Oil Industry
Agricultural Irrigation and Drainage	Chemical Industry
Food and Beverage Industry	Mining
Iron and Steel Industry	Marine
Building System	Fire Fighting



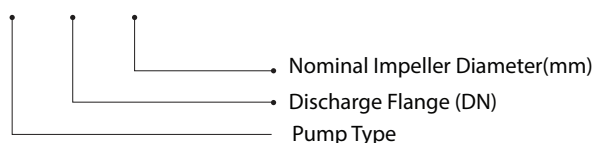
Design Features

- FK-V series pumps have designed for pumping non-abrasive and small particulars liquids.
- FK-V series have a closed impeller balanced by vanes located behind the impeller to minimize the axial load is taken in dynamic load balancing.
- FK-V series pump has just one impeller, pump and motor are connected by coupling. it gives your advantages for easy disassembling.
- Sealing is provided by gland packing. Sealing is provided by also mechanical seal as customer request.
- Easy disassembly to pump and change impeller, bearings, and seals.
- All impellers are statically and dynamically balanced according to ISO 1940 class 6.3.
- FK-V comes in 29 basic models covering wide range of operational area.
- Direction of rotation is clockwise viewed from the driver end.
- Optionally, pumps can be manufactured with shaft bushing and/or wear rings.
- Basic models designed with variety of motors (50Hz - 60Hz) 1500 - 3000 RPM.



Pump Code

FK-V 100 - 250





DESCRIPTIONS



DIN



EN



AISI/SAE/ASTM

Cast Iron	0.6025	EN-GJL-250 (GG 25)	A 48 Class 40-B
Ductile Iron Casting	0.7040	EN-GJS-400-18-LT (GGG 40)	A 536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG 40.3)	A 536 60-40-18
Steel Casting	1.0619	GP 240 GHGS-C25	A216 WCB
Chrome Nickel Steel Casting	1.4308	G-X5 Cr Ni 19-10	A 351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	G-X2 Cr Ni 19-11	A 351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	G-X5 Cr Ni Mo 19-11-2	A 351 CF8M
Chrome Nickel Molybdenum Steel Casting (L.C.)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351 CF3M
Austenitic Steel Casting	1.4500	G-X7 Cr Ni Mo Cu N 25-6-3-3	A 351 CN7M
Austenitic - Ferritic Steel Casting (Duplex)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 CD4MCuN
Austenitic - Ferritic Steel Casting (S.D.)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 CE3MN
Martensitic Stainless Steel Casting	1.4317	G-X4 Cr Ni 13-4	A 352 CA6NM
Martensitic Stainless Steel Casting	1.4008	G-X7 Cr Ni Mo 12-1	A 217 CA15
Bronze Casting (Tinned)	2.1050.01	G-Cu Sn 10	B 427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-Cu Al10 Ni	B 148 C95500
Bronze Casting (Leaded)	2.1096.01	G-Cu Sn 5 Zn Pb	B 584 C83600
Carbon Steel	1.0503	C 45	AISI 1045
Chromium Steel	1.4021	X20 Cr13	A 276 Type 420
Chrome Steel (Heat Treatment)	1.4021	X20 Cr13	A 276 Type 420+QT
Chrome Nickel Steel	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Chrome Nickel Molybdenum Steel (L.C.)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316L
Duplex (Austenitic-Ferritic) Steel	1.4460	X3 Cr Ni Mo N 27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2 Cr Ni Mo N 22-5-3	UNS S32205
Ductile Iron Casting	0.7050	EN-GJS-500- 7 -LT (GGG 50)	A 536 70-50-05



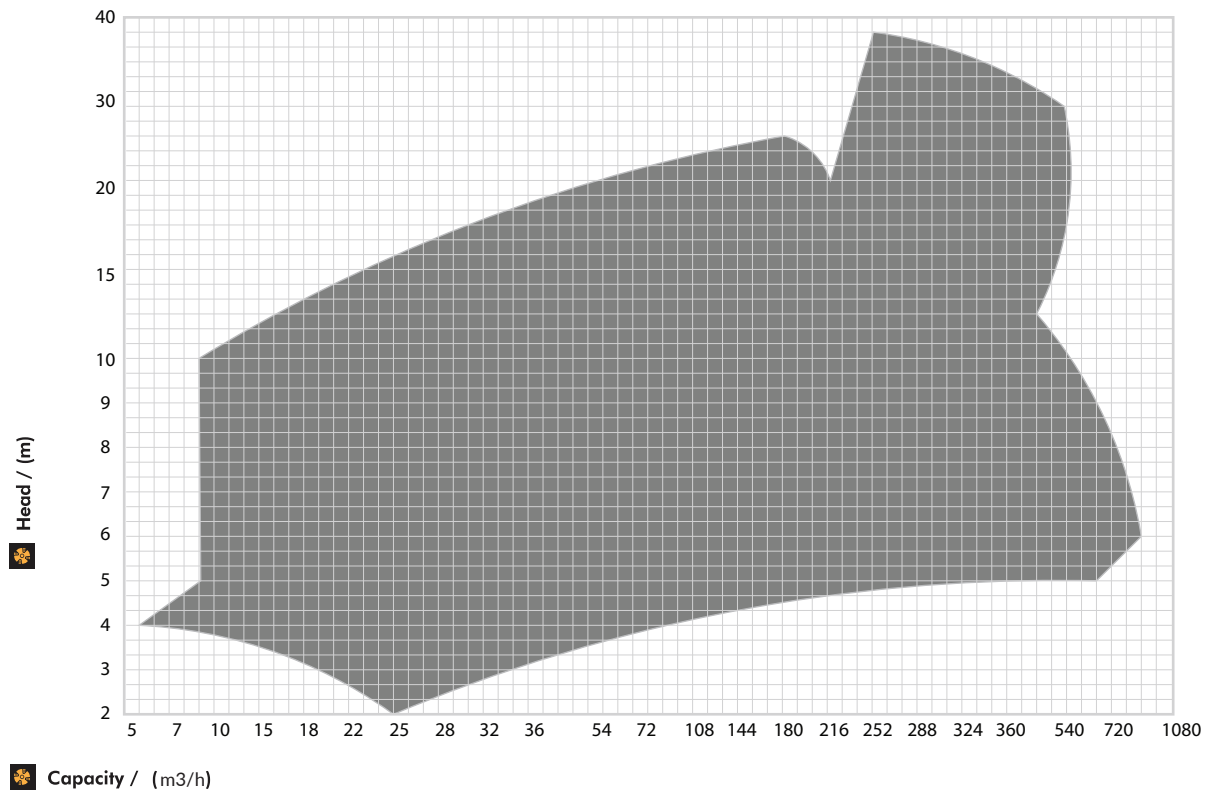


SELECTION CHARTS



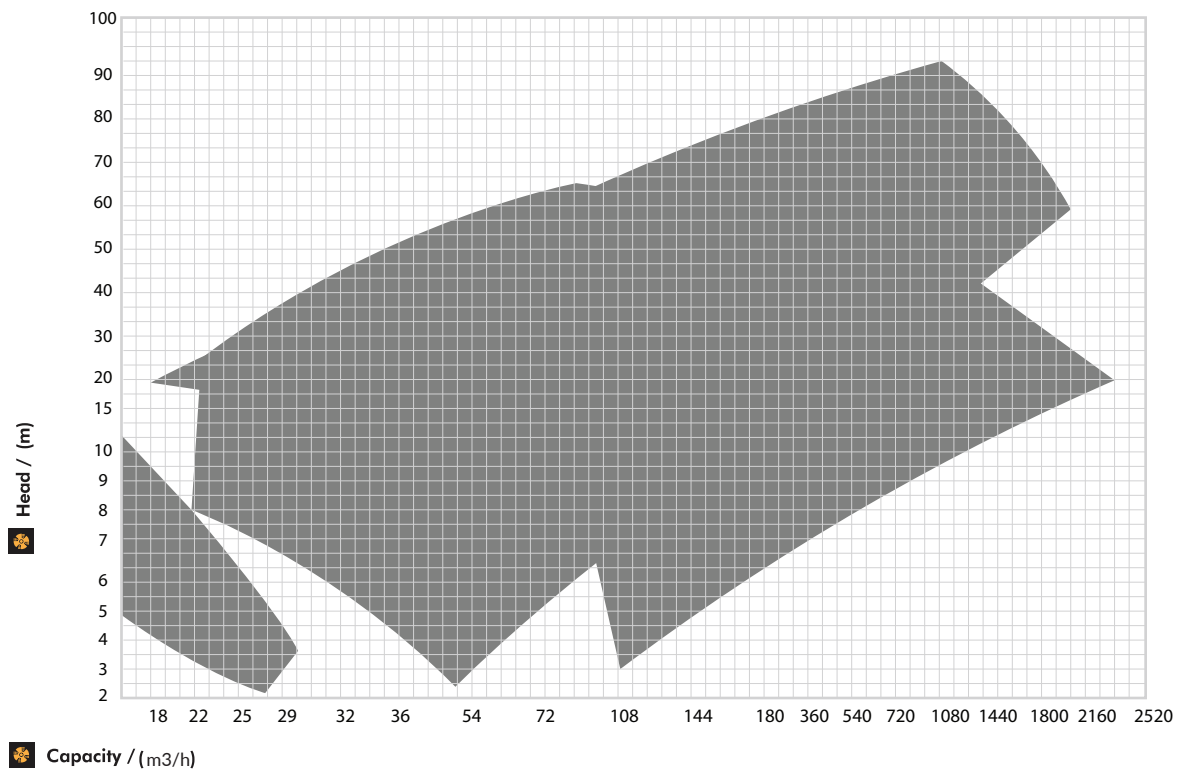
(50 Hz)

Sewage (Single Vane) Pumps



(50 Hz)

Sewage (Double Vane) Pumps

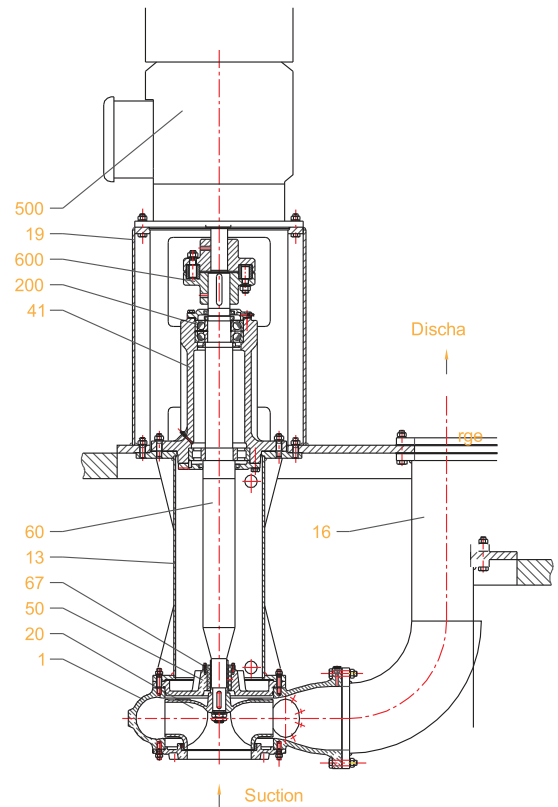
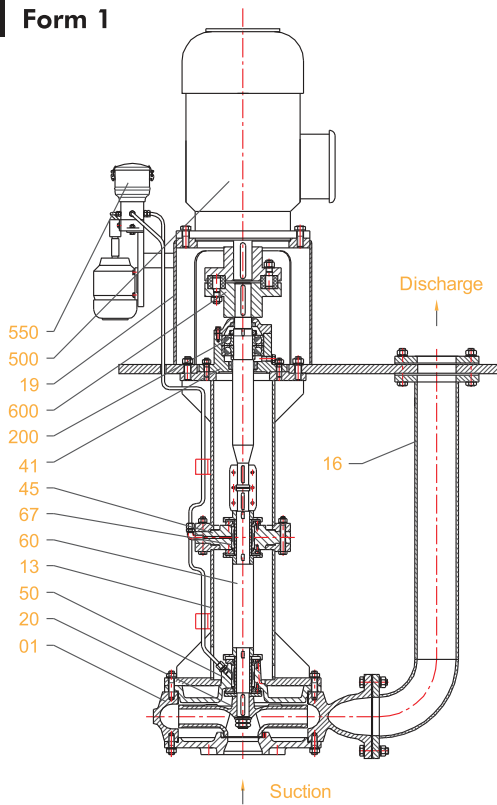




SECTIONAL VIEW



Form 1



Part List

01	Volute
13	Column Pipe
16	Discharge Pipe
19	Motor Stool
20	Impeller
41	Thrust Bearing
45	Intermediate Bearing
50	Stuffing Box
60	Shaft
67	Bearing Sleeve
200	Bearing
500	Electrical Motor
550	Grease Pump
600	Coupling

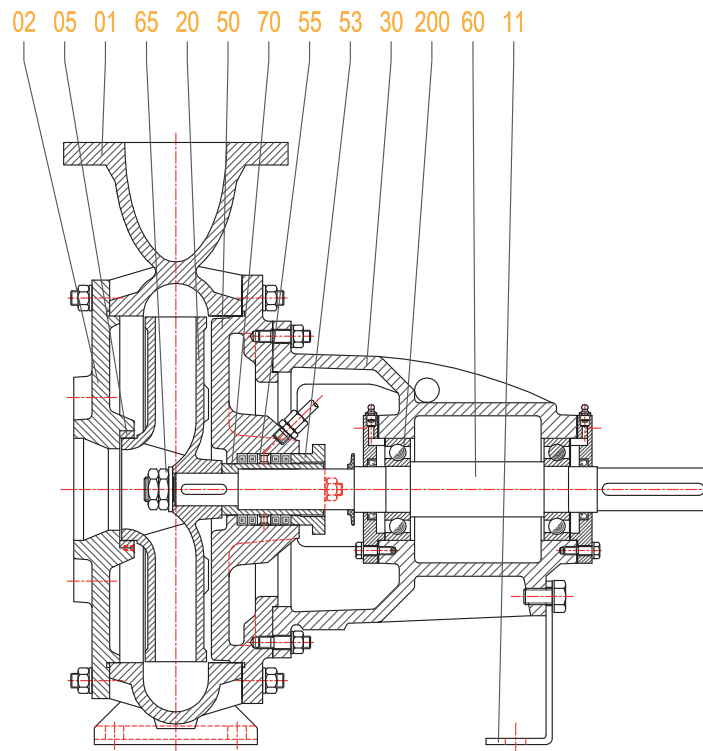




SECTIONAL VIEW



Form 2



Part List

01	Volute
02	Suction Mouth
05	Wear Ring
11	Support Foot
20	Impeller
30	Bearing Housing
50	Stuffing Box
53	Gland
55	Lantern Ring
60	Shaft
65	Impeller Nut
70	Shaft Sleeve
200	Bearing

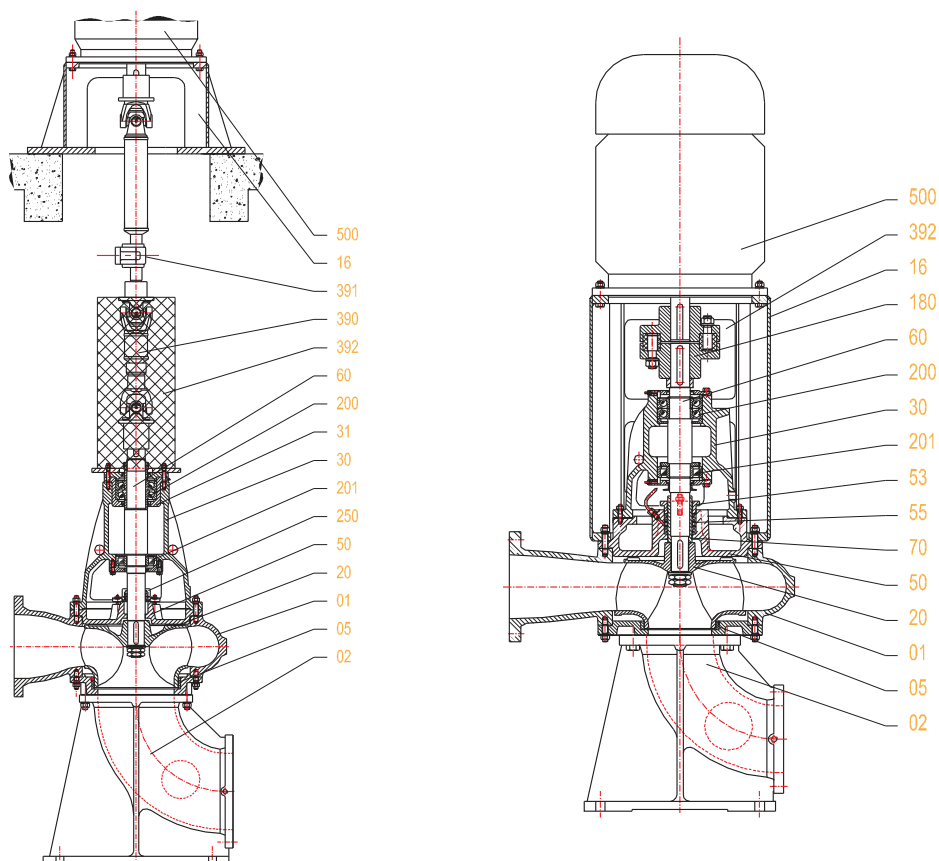




SECTIONAL VIEW



Form 3



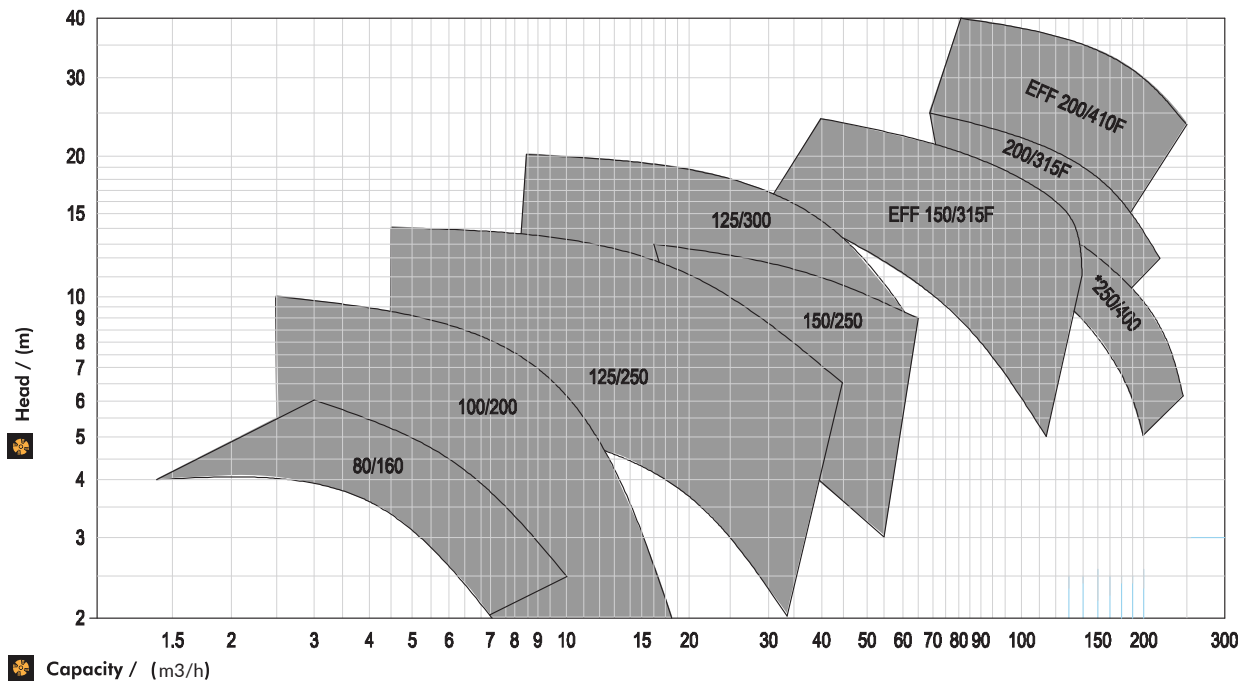
Part List

01	Volute
02	Suction Bendh
05	Wear Ring
16	Motor Stool
20	Impeller
30	Bearing Housing
31	Bearing Housing
50	Stuffing Box
53	Gland
55	Lantern Ring
60	Shaft
70	Shaft Sleeve
180	Coupling (CAP-VM)
200	Bearing (73....)
201	Bearing (NU....)
250	Mechanical Seal
390	Cardan Shaft (CAP-VS)
391	Intermediate Bearing (CAP-VS)
392	Safety Guard
500	Electric Motor

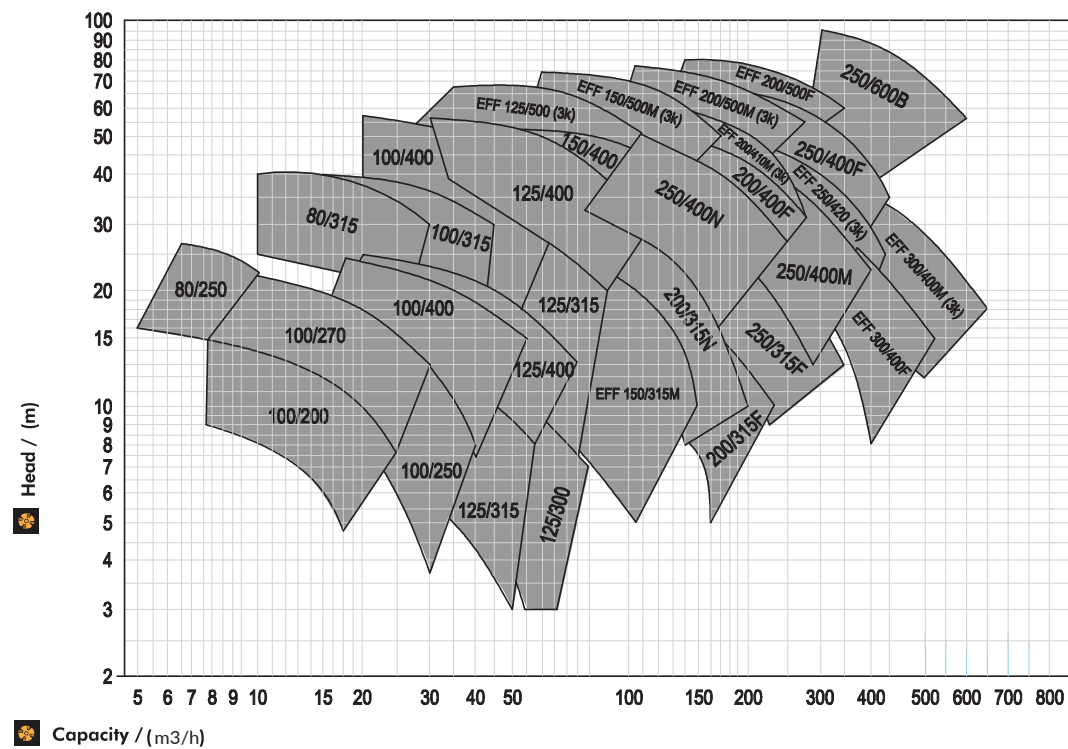




Sewage (Single Vane) Pumps



Sewage (Double Vane) Pumps

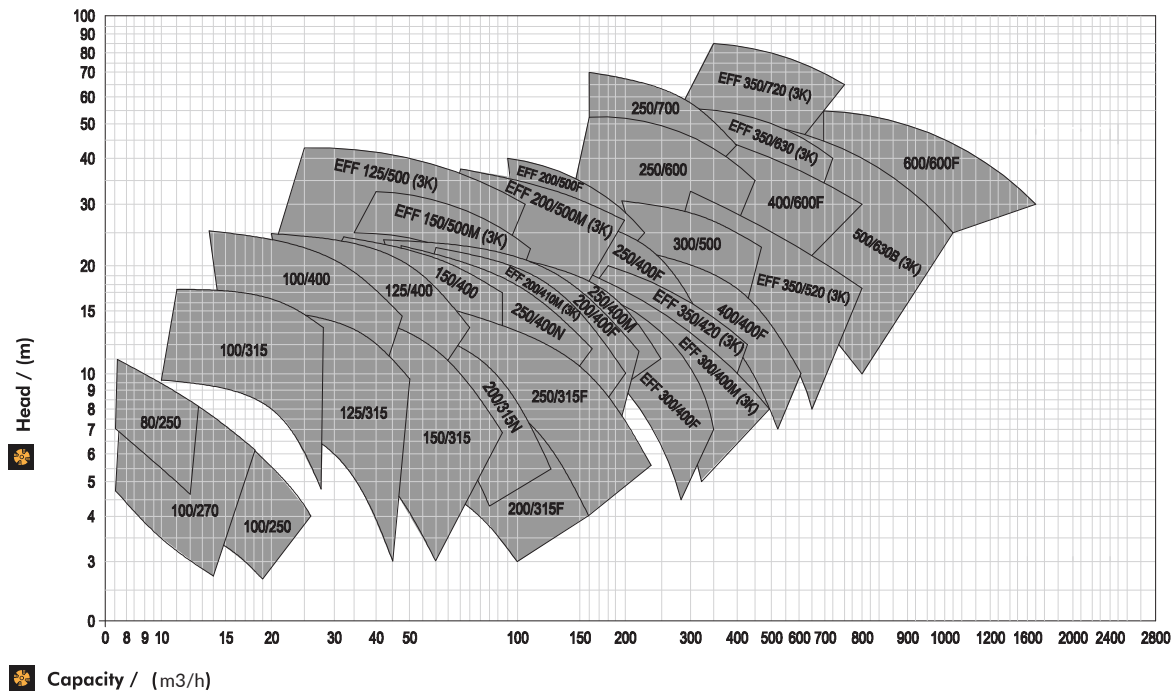




SELECTION CHARTS

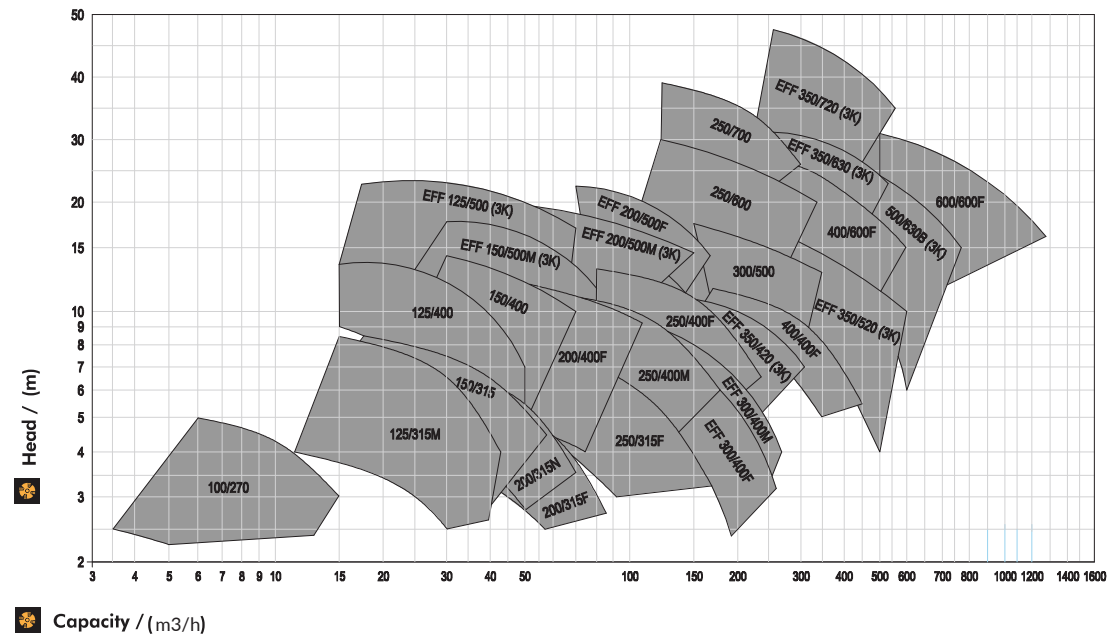
1000 rpm

Sewage (Double Vane) Pumps



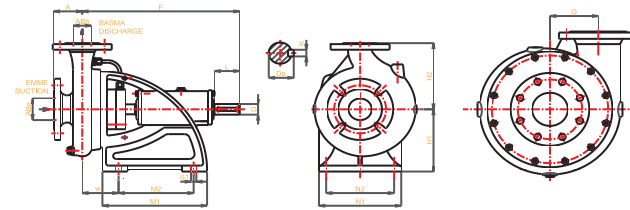
750 rpm

Sewage (Double Vane) Pumps

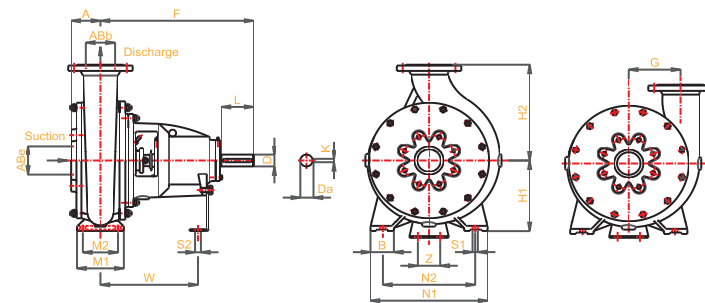




PUMP DIMENSIONS



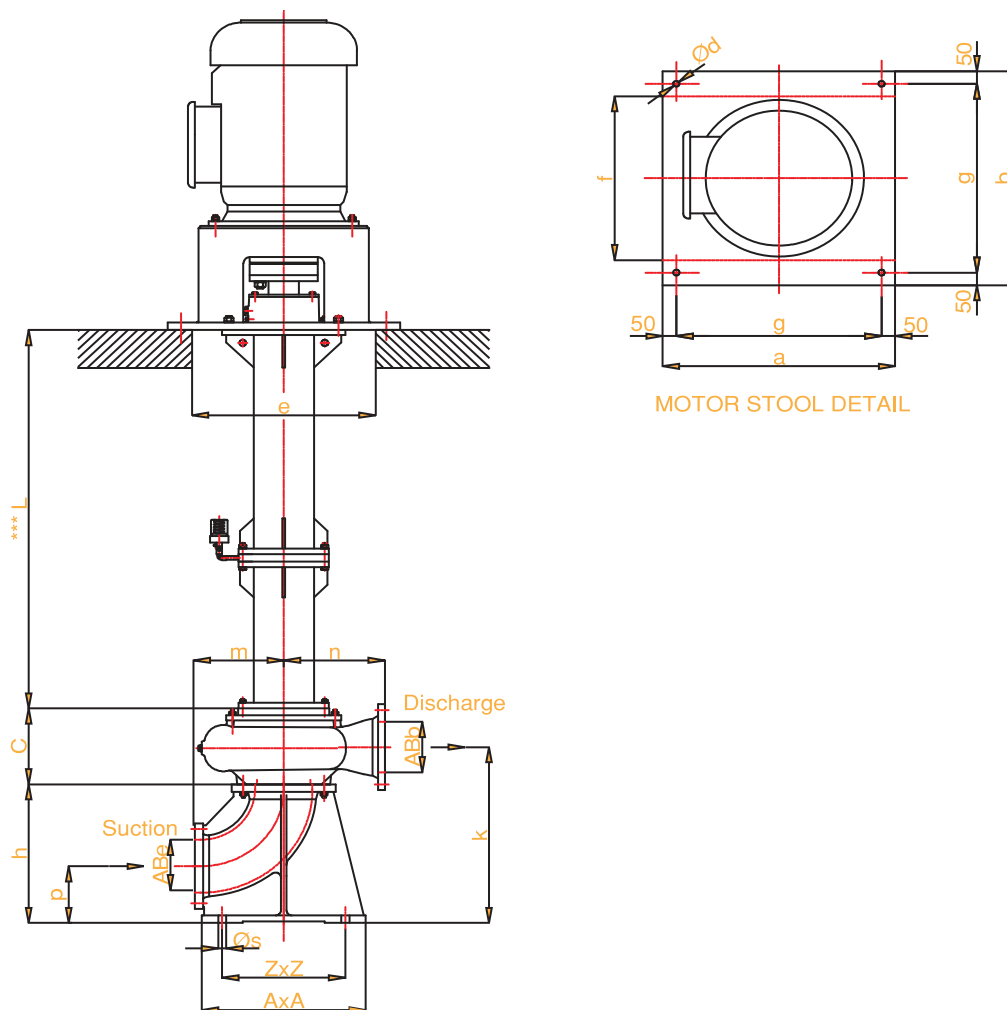
PUMP TYPE	Discharge ABb-PN10	Suction ABe-PN10	A	F	H1	H2	M1	M2	N1	N2	S1	D	Da	K	L	W	G
40 N	40		100	455		170										117	-
50 F		50		450												102	-
50 N			105	463				210								115	-
50 NA 250	50	65		466		225										128	-
50/200			80	455		200										102	-
80/160		80	65	463												115	-
80/270			61	445	188	235	295		230	190	15	32	35	10	70	97	135
100/200			61	473												125	-
100/200(S)			90	508		246		220								160	-
100/250		100	90	468		300										120	-
100/270V			72	448		235										110	135
100/270M			164													110	



PUMP TYPE	Discharge ABb-PN10	Suction ABe-PN10	A	F	H1	H2	B	M1	M2	N1	N2	S1	D	Da	K	L	W	Z	S2	G
80/250		80	80	487	200	280		125	85	360	280	M16	32	35	10	80	305	100		-
EFF 80/260		125	125	555	250	80		160	100	400	315	M12	42	45	12	110	371	150		-
80/270		80	61	472	225	235		125	85		320		32	35	10	80	312			135
80/315			73	555	250	340	85	120	475	400		M16	42	45	12	110	370		M12	-
EFF 80/320		125	125	555		300		100					42	45	12	110	370	100		-
100/250		100	78	493	225	300	80	160			315	M12	32	35	10	80	330			-
EFF 100/260		150	150	550	250	300		120	400				42	45	12	110	365			-
100/315		100	100	523		340						M16	42	45	12	110	333			-
EFF 100/320		150	140	580	275			200				M12	42	45	12	110	395	150	M20	-
100/400		100	104	553	315	367	120	150	550	400		M20					369			-
125/250			120	475	250	315		160	120	400	315		32	35	10	80	335	100	M12	-
125/300		125	116	529	288	335		200		500	400	M16					369			-
125/315			83	557	280	315							42	45	12	110	398			-
125/400			107	559	315	370							42	45	12	110	373	150		-
EFF 125/500		150	160	720	355	450	100	250	150	550	450	M20	60	64	18	140	480	190		-
150/250		200	159	577	280	355				500	400		42	45	12	110	405	15		-
150/315			118	569	255	380		200					42	45	12		385	100		-
EFF 150/315		150	180	570		400				550	450	M16				110		150		-
150/400			112	630									52	56	16		420			-
EFF 150/500			180	715	380	500	130	250	180	560	450		60	64	18	140	475	190		-
200/315N		200	127	565	315	360	100	250	180	500	400	M20					381	150	M20	-
200/315F			144	585	330	370	150	240	160	600	500		42	45	12	110	401			-
EFF 200/320		250	200	565	375	500	100	220	140	550	450						380			-
200/400		200	148	764	380	530	150	280	200	650	500	M24	60	64	18		515			-
EFF 200/410		250	180	740	355	500	120	250	150	550	450	M20					490			-
200/500		200	210	874		560	160	280	200	720		M27					630			-
EFF 200/500		250	200	820	425	560	120	210	700			M20				140	575	190		-
250/400N		200	140	850									70	75	20					-
250/400M		250	160		380	480	140	250	180	600	500	M27					605			-
250/400F		300	295	855																-
EFF 250/420		250	210	720	400	600	130	170	800	670		M24	60	64	18	140	480			-
250/600		300	280	1213	550	650	160	350	250	900	740		100	106	28	210	847	200	M24	-
250/700			321	1159	650	750	180	400	280	1100	940						743	400		-
EFF 300/400		350	170	880	500	600				800		M27					605			-
300/500		300	335	882	500	580	160	350					70	75	20	140				-
EFF 350/420		350	200	836	560												590			-
EFF 350/520			265	835	680		800	225	400											-
EFF 350/630		400	300	1275	670			300	1080	860		M24	100	106	28	210	915	190	M20	-
400/400			243	850	580							M30	70	75	20		116	606		-
400/402			388	858	573	565	150	350	270	800	660	M27				140	613			-
EFF 400/500		400	300	1375	600	800	250	400	300	1000	750	M36	100	106	28	210	1010			-
400/600			417	1035	550		160			900	740	M27	80	85	22	150	900	240		-
400/700								400	300	1150	1000									-
500/600		500	350	1275	700	700	250	440	340	1250	1100	M36	100	106	28	210	915	200		-
500/630A																				-
500/630B																				-
600/600		600	422	1202	800		325	500	400	1300	1000					210	814	400	M24	500



PUMP DIMENSIONS

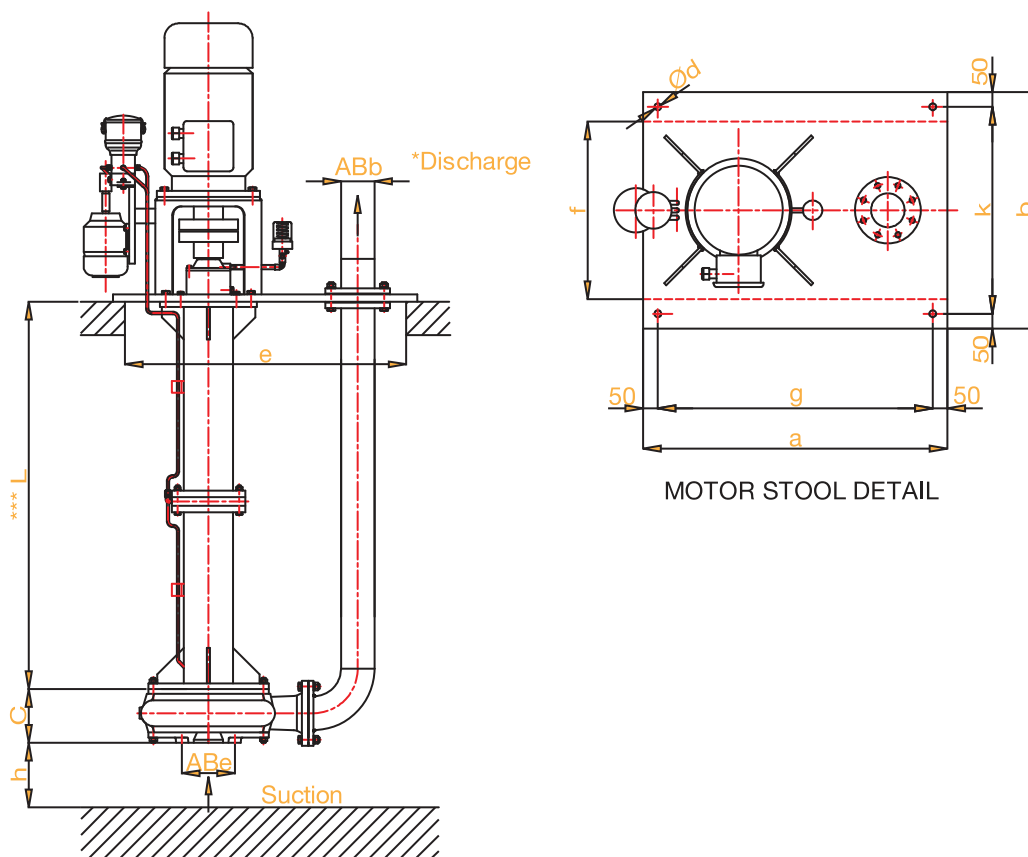


PUMP TYPE	Discharge ABb-PN10	Suction ABe-PN10	a	b	g	Ød	e	f	p	h	C	k	m	n	AXA	ZxZ	Øs	Anchor Bolt									
50/200V	50	65	400	450	350	20	400	300	125	240	95	290	145	200	250x250	200x200	20	M18X200									
80/160	80	80	700	700	600	23	450	500	150	340	135	405	190	280	350x350	250x250	23	M20x200									
80/250							600				118	400		267													
80/270							500				128	410		340													
80/315							550				152	410		340													
100/250	100	100	700	700	600	28	600	500	195	375	170	465	200	300	400x400	300x300											
100/270							500				132	447		235													
100/315							600				195	475		340													
100/400							600				230	480		367													
125/250N-F	125	125	800	800	700		650	550	185	400	210	540	215	315	450x450	350x350											
125/315N-F							215	485			370																
125/400M							240	510			300																
150/315M							150	150			900	900		800	28	750	640	210	460	260	580	275	400	500x500			
150/400M	276	472	400																								
200/315N	200	200	1000	1000	900	28			850	760			225							550	282		682	325	340	600x600	450x450
200/315F																					302		700		370		
200/400M							366	700			535																
250/400N							250	250			1000	1000		900		28	850	760	250		600	335	690		480	480	650x650
250/400M	304	760	350																								
250/400F	285	665	332	853	380				700x700	550x550																	





PUMP DIMENSIONS



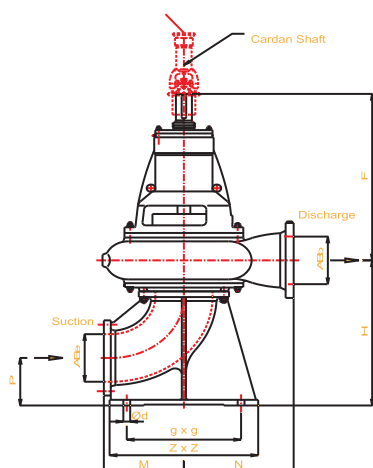
MOTOR STOOL DETAIL

PUMP TYPE/	Discharge ABb-PN10	Suction ABe	C	h min .	e	a	g	b	k	f	Ød	Anchor Bolt						
50/200V	50	65	95	150	600	600	500	450	350	300	20	M18x200						
80/160V	80	80	135	200				750	750	650	700	600	500	23	M20x200			
80/250			118					900	900	800	750	650	550					
80/270			128					1000	1000	900	800	700	600					
80/315			152					1250	1250	1150	800	700	600					
100/250	100	100	170	250	800	800	700	700	600	500	28	M24x250						
100/270			132										1250	1250	1150	800	700	600
100/315			195										1400	1500	1400	1000	900	800
100/400			230										1400	1500	1400	1000	900	800
125/250N-F	125	125	210	300	800	800	700	700	600	500								
125/315N-F			215										1250	1250	1150	800	700	600
125/400M			240										1250	1250	1150	800	700	600
150/315M	150	150	260	400	1250	1250	1150	800	700	600								
150/400M			276						1250	1250			1150	750	650			
200/315N	200	200	282	450	1250	1250	1150		750	650								
200/315F			315															
200/400M			366															
250/400N	250	250	335	500	1400	1500	1400	1000	900	800								
250/400M			304															
250/400F			300										332					





PUMP DIMENSIONS

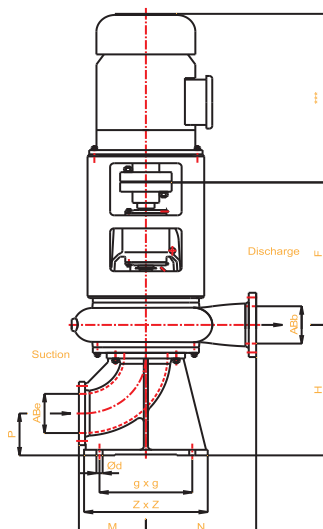


PUMP TYPE	Discharge ABb-PN10	Suction ABe-PN10	F	H	M	N	P	Z x Z	g x g	Ød	Anchor Bolt			
50/200V	50	65	440	294	145	200	125	270X270	200X200	20	M18x200			
80/160	80	80	480	408	190		150	350X350	250X250	23		M20x200		
80/250			454	405		280	185	440X440	345X345					
EFF 80/260		125	555	528	215		315	150	350X350		350X350			
80/270		80	454	405	190	340								
80/315			555	413										
EFF 80/320	80	125	555	528	215	300	185	440X440	345X345	28	M24x250			
100/200	100	100	498	435	195	246	190	390x390	295x295					
100/250			465	446								300		
EFF 100/260		150	550	613	275	300	210	500x500	350X350			23	M20x200	
100/270		100	100	448	440	195	315	190	390X390			295x295	28	M24x250
100/315				523	468					340	210		500X500	350X350
EFF 100/320	125	150	580	603	275	340	210	500X500	350X350	28	M24x250			
100/400		100	553	472	195	340	190	390X390	295X295	23	M20x200			
125/250		125	475	543	215	315	185	440X440	345X345					
125/300		125	150	529	589	275	335	210	500x500	350X350	28	M24x250		
125/315			125	561	485	215	315	185	440X440	345X345	23	M20x200		
125/400	559			510	370									
EFF 125/500	150	150	720	620	275	450	210	500x500	350X350	28	M24x250			
150/250		200	577	712	325	355	225	600x 600	500x500	30	M27x300			
150/315		150	150	570	581	275	380	210	500x500	350X350	28	M24x250		
EFF 150/315				643	643								400	
150/400			644	575	500									
EFF 150/500	200	200	715	733		325	370	225	600x 600	500x500	30	M27x300		
200/315N			565	680									370	250
200/315F			585	697	370								250	650x650
EFF 200/320		250	565	803	350	500	250	650x650						
200/400		200	779	703	325	530	225	600X600						
EFF 200/410	250	250	740	780	350	500	250	650x650						
200/500		200	874	763	325	560	225	600X600						
EFF 200/500		250	820	803	350									
250/315F		250	250	702	784	350	440	250	650x650					
250/400N			200	757	770	325	480							
250/400M	250		875	763	350	285				730X705			600X600	
250/400F	300		882	850	380	250	650x650	500X500						
EFF 250/420	300		250	720	813	350	600	250	650x650	500X500				
250/600		300	948	380	650	285	730X705	600X600						
250/600B		350	1272	1058		445	330	850X850	700x700					
250/700		300	1159	853	380	750	205	730X705	600x600					
EFF 300/400		300	350	850	948	445	600	330	850X850	700X700				
300/500	300		882	1000	380	585	285	730X705	600X600					
EFF 350/420	350	350	836	978	445	800	330	850X850	700X700					
EFF 350/520		400	880	1155	510		800	380	1000x1000	800X800				
EFF 350/630			915	1180										
400/400	858		1130											
400/402	1276													
EFF 400/500	400	500	1375	1403	635	700	470	1200X1200	1000X1000					
400/600			1259	1520										
400/700			1275	1454						960			700	
500/600	500	600	1850	960	1850X1850	1650X1650								
500/630B														
600/600	600	1202												





PUMP DIMENSIONS



PUMP TYPE	Discharge ABb-PN10	Suction ABe-PN10	F	H	M	N	P	Z x Z	g x g	Ød	Anchor Bolt
50/200V	50	65	440	294	145	200	125	270X270	200X200	20	M18x200
80/160	80	80	480	408	190	280	150	350X350	250X250	23	M20x200
80/250		125	454	405	190	315	185	440X440	345X345		
EFF 80/260		80	454	405	190	340	150	350X350	350X350		
80/270		125	555	528	215	300	185	440X440	345X345		
80/315		80	555	413	190	340	150	350X350	350X350		
EFF 80/320	80	125	555	528	215	300	185	440X440	345X345	28	M24x250
100/200	100	100	498	435	195	246	190	390x390	295x295		
100/250		150	465	446	195	300	210	500x500	350X350		
EFF 100/260		100	550	613	275	340	190	500x500	350X350		
100/270		150	448	440	195	315	210	390X390	295x295		
100/315	100	100	523	468	195	340	190	390X390	295X295	23	M20x200
EFF 100/320		150	580	603	275	340	210	500X500	350X350	28	M24x250
100/400		100	553	472	195	340	190	390X390	295X295	23	M20x200
125/250		125	475	543	215	315	185	440X440	345X345	28	M24x250
125/300		150	529	589	275	335	210	500x500	350X350	28	M24x250
125/315	125	125	561	485	215	315	185	440X440	345X345	23	M20x200
125/400		150	559	510	215	370	210	500x500	350X350	28	M24x250
EFF 125/500		150	720	620	275	450	210	500x500	350X350	30	M27x300
150/250		200	577	712	325	355	225	600x 600	500x500	30	M27x300
150/315		150	570	581	275	380	210	500x500	350X350	28	M24x250
EFF 150/315	150	150	644	643	275	400	210	500x500	350X350	30	M27x300
150/400		200	644	575	275	400	210	500x500	350X350		
EFF 150/500		200	715	733	325	500	225	600x 600	500x500		
200/315N		200	565	680	325	370	250	650x650	500X500		
200/315F		200	585	697	325	370	250	650x650	500X500		
EFF 200/320	200	250	565	803	350	500	250	650x650	500X500	30	M27x300
200/400		200	779	703	325	530	225	600X600	500X500		
EFF 200/410		250	740	780	350	500	250	650x650	500X500		
200/500		200	874	763	325	560	225	600X600	500X500		
EFF 200/500		250	820	803	350	560	250	650x650	500X500		
250/315F	250	250	702	784	350	440	250	650x650	500X500	30	M27x300
250/400N		200	757	770	325	480	285	730X705	600X600		
250/400M		250	875	763	350	480	250	650x650	500X500		
250/400F		300	882	850	380	600	285	730X705	600X600		
EFF 250/420		250	720	813	350	600	250	650x650	500X500		
250/600	250	300	948	948	380	650	285	730X705	600X600	30	M27x300
250/600B		350	1272	1058	445	750	330	850x850	700X700		
250/700		300	1159	853	380	750	205	730X705	600x600		
EFF 300/400		350	850	948	445	600	330	850X850	700X700		
300/500		300	882	1000	380	585	285	730X705	600X600		
EFF 350/420	350	350	836	978	445	445	330	850X850	700X700	30	M27x300
EFF 350/520		400	880	1155	510	800	380	1000x1000	800X800		
EFF 350/630		400	915	1180	510	800	380	1000x1000	800X800		
400/400		400	858	1130	510	800	380	1000x1000	800X800		
400/402		400	858	1276	510	800	380	1000x1000	800X800		
EFF 400/500	400	500	1375	1403	635	700	470	1200X1200	1000X1000	30	M27x300
400/600		500	1259	1520	635	700	470	1200X1200	1000X1000		
400/700		500	1275	1454	635	700	470	1200X1200	1000X1000		
500/600		500	1275	1454	635	700	470	1200X1200	1000X1000		
500/630B		500	1275	1454	635	700	470	1200X1200	1000X1000		
600/600	600	600	1202	1850	960	700	470	1850X1850	1650X1650	30	M27x300

